

What Is Claimed Is:

1. An electrosurgical instrument comprising:

a handpiece;

a tool member at least partially supported within the handpiece, the tool member having a proximal end adapted to engage an acoustic vibrator and a distal tool tip, the tool member being formed from an electrically conductive material and at least partially defining an aspiration channel; and

a nosecone positioned about a distal end of the handpiece and a proximal end of the tool member, the nosecone including an inner housing and a switch assembly, the switch assembly being secured to the inner housing and including a fluid tight dielectric seal for sealing the switch assembly from an outer surface of the nosecone, the switch assembly being positioned to control delivery of electrosurgical energy to the tool member.

2. An electrosurgical instrument according to Claim 1, wherein the fluid tight dielectric seal is formed from an electrically insulative elastomeric material.

3. An electrosurgical instrument according to Claim 2, wherein the electrically insulative material is overmolded at least partially about the switch assembly and inner housing and forms an outer housing about the inner housing of the nosecone.

4. An electrosurgical instrument according to Claim 3, wherein the outer housing includes a proximal end which extends proximally beyond a proximal end of the inner housing, the proximal end of the outer housing being dimensioned to sealingly engage a distal end of the handpiece.

5. An electrosurgical instrument according to Claim 4, wherein the inner surface of the proximal end of the outer housing includes at least one protrusion for sealingly engaging an outer surface of the handpiece.
6. An electrosurgical instrument according to Claim 5, wherein the at least one protrusion includes a plurality of annular rings.
7. An electrosurgical instrument according to Claim 3, further including a flue positioned at least partially about the tool member, an outer surface of the tool member and an inner surface of the flue defining an irrigation fluid delivery channel.
8. An electrosurgical instrument according to Claim 7, wherein the outer housing of the nosecone and the inner housing of the nosecone define an annular recess for sealingly receiving a proximal end of the flue.
9. An electrosurgical instrument according to Claim 7, further including an irrigation conduit for delivering irrigation fluid to the irrigation fluid delivery channel and an aspiration conduit for receiving fluid from the aspiration channel.
10. An electrosurgical instrument according to Claim 1, wherein the tool member includes a coupling member and a removable tip, the coupling member having a distal end adapted to releasably engage the removable tip and a proximal end adapted to releasably engage an acoustic vibrator.
11. An electrosurgical instrument according to Claim 10, further including an aspiration conduit, wherein the coupling member includes an aspiration bore communicating with the aspiration channel and the nosecone includes bore to facilitate insertion of the aspiration conduit into the aspiration bore.

12. An electrosurgical instrument according to Claim 11, further including a locking member supported on a distal end of the aspiration conduit, wherein the nosecone includes an engagement member, the locking member being adapted to releasably engage the engagement member to secure the aspiration conduit in fixed relation to aspiration channel.

13. An electrosurgical instrument according to Claim 7, further including an ionizable gas supply channel and an electrode positioned to interact with gas supplied through the ionizable gas supply channel, the ionizable gas supply channel having a first end adapted to be connected to a source of ionizable gas and a second end positioned adjacent the distal tool tip of the tool member.

14. An electrosurgical instrument according to Claim 13, wherein the electrode is a wire electrode which extends through the ionizable gas supply channel and has a proximal end adapted to communicate with a source of electrosurgical energy.

15. An electrosurgical instrument according to Claim 14, wherein the wire electrode is adjustably positioned within the ionizable gas conduit such that a distal end of the wire electrode can be moved in relation to the ionizable gas conduit.

16. An electrosurgical instrument comprising:

a handpiece;

a tool member at least partially supported within the handpiece, the tool member having a proximal end adapted to engage an acoustic vibrator and a distal tool tip, the tool member at least partially defining an aspiration channel and being formed of an electrically conductive material;

a conductive member having a first end adapted to communicate with a source of electrosurgical energy and a second end positioned to deliver electrosurgical energy to the tool member;

an ionizable gas supply channel having a first end adapted to be connected to a source of ionizable gas and a second end positioned adjacent the distal tool tip of the tool member; and

an electrode positioned to interact with the ionizable gas supplied through the ionizable gas supply channel, the electrode being adapted to communicate with a source of electrosurgical energy.

17. An electrosurgical instrument according to Claim 16, wherein the electrode includes a wire electrode which extends at least partially through the ionizable gas supply channel.

18. An electrosurgical instrument according to Claim 17, wherein the wire electrode is adjustably positioned within the ionizable gas conduit such that the distal end of the wire electrode is movable axially within and from the ionizable gas conduit.

19. An electrosurgical instrument according to Claim 17, further including a switch assembly, the switch assembly being operable to selectively deliver electrosurgical energy, independently or simultaneously, to the tool member and the wire electrode.